Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

PROPOSED
Permit: V-07-015
Accuride Corporation
Henderson, KY 42420
March 14, 2008
Linda Martin, Reviewer

SOURCE ID:	21-101-00030
AGENCY INTEREST:	1786
ACTIVITY:	APE20020001

SOURCE DESCRIPTION:
Accuride Corporation (Accuride) is a manufacturer of wheels for heavy, medium, and light-duty trucks. The Accuride Henderson, Kentucky facility is located at 2315 Adams Lane in Henderson County and primarily manufactures truck wheels. Accuride was issued an initial Title V permit on March 5, 1998.

Accuride manufactures wheels by means of two processes. The first process starts with the rim line where flat steel is rolled to form the wheel rim. The discs are manufactured by spinning and stamping. The rim and disc are then washed before proceeding to the assembly area where the disc and rim are assembled and welded to form the wheel. The wheel is then conveyed to the paint line where the wheel undergoes a multistage electrocoating process where the paint coating is applied. The coated wheel is then dried in the dehydration and curing oven. Once the wheels leave the ovens, they are either conveyed to the stacking area where they are prepared for shipping or sent to the powder coating process.

The second process involves a powder coating system. A portion of the electrocoated wheels from the first process are conveyed to the second process for powder coating. The powder coating includes pre-washing, drying, powder coating, and oven curing stages. Stage 1 of the pre-wash involves the use of a slightly acidic surfactant cleaner. Stage 2 of the pre-wash is a clean water rinse followed by Stage 3, which is a water/surfactant spray rinse. From the pre-washing cycle, the wheel is conveyed to a natural gas fired drying unit and a chilled-air cooling tunnel. The wheel is then powder coated in an environmentally controlled room where the booth exhaust is re-circulated into the booth (integral recirculation system). Following the powder coating booth, a natural gas-fired curing oven is employed to cure the powder coating. The wheels are then conveyed to the stacking area where they are prepared for shipping.

On September 5, 2002, the Division received an application from the permittee for the renewal of Title V Permit V-98-039, issued March 5, 1998. Additional revised information was submitted by the applicant on June 8, 2007. This permit is being issued pursuant to 401 KAR 52:020 as the Title V renewal permit for this source.

COMMENTS:

Type of control and efficiency:

Baghouses are utilized to control PM emissions from the shot blasting and welding operations. Low VOC coatings are used as a method of controlling VOC emissions. In addition, this source is subject to the requirements of 40 CFR 63, Subpart MMMM, and they have opted to utilize compliant (low HAP content) coatings and solvents to reduce organic HAP emissions without the use of an add-on pollution control device. The related emission standards and other related requirements are included in the permit and summarized below (see Applicable Regulations).

Emission factors and their source:

Emission factors from AP-42 were used to determine the natural gas and #2 fuel oil combustion emissions from the two boilers (Boiler #1 and #2); and the natural gas combustion emissions from the process the Powder Coating Line 447 boiler, ovens, space heaters and the air make-up unit. Emission factors from AP-42 were used to determine process welding emissions. Pollutant emissions from surface coating were calculated based on material balance using raw material usage rates and the PM10, VOC and HAP content in the raw materials from the MSDS, as provided by the permittee. Particulate emissions from the shot blaster were based on material balance.

Applicable regulations:

401 KAR 59:010, *New Process Operations*, applies to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975. This rule applies to EP 01, 02, 03, and 04.

401 KAR 59:015**,** *New Indirect Heat Exchangers*, applies with respect to particulate emissions and sulfur dioxide emissions to each affected facility with a capacity of 250 mmBtu/hr or less and greater than one (1) mmBtu/hr, and commenced on or after April 9, 1972. This rule applies to EP 09, 12 and 33 (Boilers #1, #2 and powder coating line boiler, respectively); and 15, 24, 34 and 35 (process heaters). Other combustion units at this source are direct fired units that are not subject to this rule.

401 KAR 59:225, *New Miscellaneous Metal Parts and Products Surface Coating Operations*, applies to paint lines 450 and 449, each of which commenced after the February 4, 1981 effective date of the regulation and which are part of a major source located in a county or portion of a county designated attainment or marginally nonattainment for ozone in 401 KAR 51:010. Pursuant to 401 KAR 59:225, Section 6(1)(b), each affected facility (line) is exempt from the provisions of 401 KAR 59:225, Section 3, since the coatings delivered to the respective applicators are compliant low-VOC coatings of less than three and five-tenths (3.5) lb/gal, excluding water and exempt solvent. 401 KAR 59:225, Section 4(5) language was modified; “24 hr average” was removed.

401 KAR 63:002, Section 3, which incorporates by reference 40 CFR 63, Subpart MMMM, *National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*, applies to paint lines, coating lines, and electrodeposition painting lines; and that is a major source, is located at a major source, or is part of a major source of emissions of HAPs. Pursuant to 40 CFR 63.3883(b), for this existing source, the compliance date is three (3) years after January 2, 2004 (i.e., January 2, 2007). On January 2, 2007, the source was a major HAP emitting source for emissions of glycol ethers and xylene. EPs 01, 02, 03, 04, 07 and 24, are existing affected sources that apply general use coatings. Initial notification pursuant to 40 CFR 63.3910(b) was received on May 19, 2005.

On June 5, 2007 the permittee submitted information indicating the coatings applied at EP 07 and 24 (electrocoat dip tanks) changed to low-HAP content materials. For these two EPs, as well as EPs 01, 02, 03 and 04, the permittee has requested, and shall utilize, either the *Compliance material option* of 40 CFR 63.3891(a) or the *Emission rate without add-on control option* of 40 CFR 53.3891(b) to comply with the applicable emission limitation for the application of general use coatings at this source. The related requirements are included in the permit.

Non-applicable regulations:

401 KAR 60:005, which incorporates by reference 40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984* does not apply to the #2 fuel oil and #6 diesel oil storage tanks, each with a capacity 50,000 gallons, because these tanks were removed from the source in July 2003.

401 KAR 60:005, which incorporates by reference 40 CFR 60, Subpart Dc (40 CFR 60.40c), *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* is not included in this permit for Boiler Nos. 1 and 2, each with a heat input rate of 21 MMBtu/hour, because these units were constructed prior to June 9, 1989 and there are no approvals to modify or reconstruct these units.

40 CFR 60 Subpart IIII, *New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines*, does not apply to the three (3) emergency generators listed as insignificant activities because the units were installed prior to July 11, 2005 and no approval for modification or reconstruction has been issued.

401 KAR 63:002, Section 3, which incorporates by reference 40 CFR 63 Subpart ZZZZ - *Stationary Reciprocating Internal Combustion Engines (RICE)*, does not apply to the source since the three (3) emergency generators (insignificant activities) were constructed prior to 2005.

40 CFR 64, *Compliance Assurance Monitoring*, applies to emission units which have potential pre-control emission greater than 100 percent of the applicable major Part 70 threshold and use a control device to achieve compliance with an emission limitation or standard, excluding emission units subject to a MACT standard per 40 CFR 64.2(b)(1)(i). EP 24 has a potential pre-control device VOC emission rate of 100 tons per year, however, EP 24 is not equipped with a control device and is therefore not subject to this rule. No other emission unit at the facility has an uncontrolled PTE of regulated pollutants at greater than 100 percent of the applicable major Part 70 threshold. Therefore, 40 CFR 64 (CAM) is not applicable to any other emission units.

401 KAR 50:012, Section 1, *General Application of Administrative Regulations and Standards*. Pursuant to 401 KAR 50:012, Section 1(2), in the absence of a standard specified in these administrative regulations, all major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical. The potential to emit of VOC at the facility is greater than 100 tpy. However, the source is subject to 40 CFR 63, Subpart MMMM which controls organic HAPs and VOC emissions. The source is also subject to the VOC emission limitations of 401 KAR 59:225. Since these two standards apply to this source, the requirements of 401 KAR 50:012 do not apply.

PERIODIC MONITORING:

a. For compliance with 40 CFR 63 Subpart MMMM, *National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products,* coatings (as defined in 40 CFR 63.3981), thinners and/or other additives, and cleaning materials used in the affected source shall be monitored and recorded.

b. The source has been demonstrating compliance with 401 KAR 59:010, Section 3 (1)(a) for EP 01(450), 02(450), 03(449) and 04(449) through semi-annual Method 9 readings. Since the permittee has been compliant with related opacity limits, the Division has decided that the permittee shall instead perform a qualitative visual observation of the opacity of emissions from the stack of EP 01(450), 02(450), 03(449) and 04(449) at least once per operating month and maintain a log of the observations. If visible emissions from the vents are seen, then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. This method of compliance is consistent with compliance requirements for similar emission units at other sources.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.